Enrollment/ Attendance

Achievement/ Proficiency

Related Behaviors and Characteristics

# EA 3.1 Family-Child Engagement in Literacy Activities

Numerous studies have documented the importance of parental involvement in literacy activities with their children.<sup>1</sup> According to the National Center for Education Statistics, family participation in reading activities provides valuable development experiences for children. In addition to developing an interest in reading, children who are read to, told stories, and visit the library may start school better prepared to learn than other children.<sup>2</sup>

Table EA 3.1 presents three types of literacy activities that parents may engage in with their children. In 2001, a majority of 3- to 5-year-olds (57 percent) were read to by a parent or other family member every day. Fifty-four percent of children were regularly told stories (3 or more times a week), an increase from 1991 levels (39 percent).

**Differences by Race and Hispanic Origin.** There are differences in all literacy activities by race and Hispanic origin. In 2001, White, non-Hispanic children were more likely to be read to every day (64 percent) than Black, non-Hispanic children (47 percent) or Hispanic children (42 percent). Similarly, White, non-Hispanic children (58 percent) were more likely to be told a story frequently than either Black, non-Hispanic or Hispanic children (51 and 42 percent respectively) (Table EA 3.1). Also, more White, non-Hispanic children visited a library at least once in the past month (39 percent) than either Black, non-Hispanic children (31 percent) or Hispanic children (30 percent). These differences have been fairly stable over time.

**Differences by Poverty Status.** Children in families living at or above the poverty threshold are more likely to be engaged in literacy activities on a regular basis than are children who live in poverty. In 2001, 61 percent of children in nonpoor families were read to every day by a parent or other family member, compared with 48 percent of children in poor families (Figure EA 3.1).

**Differences by Mother's Education Level.** There are also substantial differences in literacy activities by mother's education level. For example, in 2001 about one-fifth (21 percent) of children whose mothers did not have a high school diploma visited a library once or more in the past month, compared with 30 percent of children whose mothers had graduated high school and 49 percent whose mothers were college graduates (Table EA 3.1).

**Differences by Family Type.** Children in two-parent families were more likely to participate in all three types of literacy activities than children who lived with one or no parent.

**Differences by Mother's Employment Status.** Children whose mothers were employed 35 hours or more per week were less likely to engage in any of the three literacy activities than children whose mothers were either working part-time or not working outside the home.

<sup>&</sup>lt;sup>1</sup> Hannon, P. (1995). Home and School: Research and Practice in Teaching Literacy with Parents. Bristol, PA: Falmer Press.

U.S. Department of Education, National Center for Education Statistics .(2000). The Condition of Education, 1999. Washington, DC: U.S. Government Printing Office.

<sup>&</sup>lt;sup>3</sup> Persons of Hispanic origin may be of any race.

Table EA 3.1

Percentage of 3- to 5-year-olds who have participated in literacy activities with a family member, by child and family characteristics: Selected years, 1993-2001

•						Told a	story a	t least		1	Visited o	library	at leas	t	
		Read	to ever	y day			three	times a	week			once in	the pas	t month	1
	1993	1995	1996	1999	2001	1993	1995	1996	1999	2001	1993	1995	1996	1999	2001
All children <sup>a</sup>	53	58	57	54	57	43	50	55	50	54	38	39	37	36	36
Sex															
Male	51	57	56	52	54	43	49	55	49	53	38	37	37	35	35
Female	54	59	57	55	60	43	51	56	50	55	38	41	36	38	37
Race and Hispanic origin <sup>b</sup>															
White, non-Hispanic	59	65	64	61	64	44	53	59	53	58	42	43	41	39	39
Black, non-Hispanic	39	43	44	41	47	39	42	47	45	51	29	32	31	35	31
Hispanic	37	38	39	33	42	38	42	47	40	42	26	27	27	25	30
Poverty status <sup>c</sup>															
At or above poverty	56	62	61	58	61	44	53	58	52	_	41	43	41	40	_
Below poverty	44	48	46	38	48	39	44	49	42	_	28	30	28	24	_
Family structured															
Two parents	55	61	61	58	61	44	52	59	52	55	41	43	41	40	38
One or no parent	46	49	46	43	48	41	46	47	44	51	30	30	29	29	30
Mother's highest educatione															
Less than high school	37	40	37	39	41	37	39	47	36	43	22	20	19	18	21
High school	48	48	49	45	49	41	48	54	48	53	31	33	31	30	30
Some college	57	64	62	53	60	45	53	55	52	53	44	42	41	40	39
College degree	71	76	77	71	73	48	55	64	55	61	55	57	56	50	49
Mother's employment statuse															
35 hours or more per week	52	55	54	49	55	43	49	53	48	51	34	35	32	_	32
Less than 35 hours per week	56	63	59	56	63	45	53	56	55	59	47	46	39	_	42
Not in labor force	55	60	59	60	58	43	50	56	50	54	37	42	40	40	48

<sup>&</sup>lt;sup>a</sup> Estimates are based on children who have yet to enter kindergarten.

Note: Data in this table have been revised and therefore do not match data presented in previous issues of this report.

Sources: Federal Interagency Forum on Child and Family Statistics. (2003). America's Children: Key National Indicators of Well-Being, 2003. Washington, DC: U.S. Government Printing Office; U.S. Department of Education, National Center for Education Statistics. (2001). National Household Education Survey, Early Childhood Program Participation. Washington, DC: U.S. Department of Education; U.S. Department of Education, National Center for Education Statistics. (1999). National Household Education Survey, Early Childhood Program Participation. Washington, DC: U.S. Department of Education; U.S. Department of Education, National Center for Education Statistics. (1996). National Household Education Survey, Parent and Family Involvement in Education File. Washington, DC: U.S. Department of Education, National Center for Education Statistics. (1995). National Household Education Survey, Early Childhood Program Participation. Washington, DC: U.S. Department of Education; U.S. Department of Education, National Center for Education Survey, School Readiness File. Washington, DC: U.S. Department of Education.

b Persons of Hispanic origin may be of any race.

<sup>&</sup>lt;sup>c</sup> Poverty estimates for 1993 are not comparable to later years because respondents were not asked exact household income.

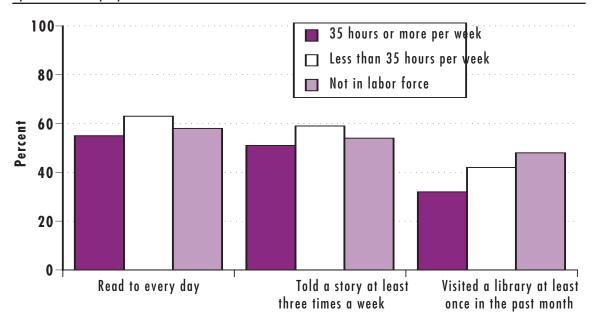
<sup>&</sup>lt;sup>d</sup> Parents include any combination of a biological, adoptive, step-, and foster mother and/or father. "No parents in the house-hold" indicates that the child is living with nonparent guardians (e.g., grandparents).

<sup>&</sup>lt;sup>e</sup> Children without mothers in the home are not included in estimates dealing with mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mothers, or female guardian (e.g., grandmother) who resides in the home with the child.

Data not available.

Figure EA 3.1

Percentage of 3- to 5-year-olds who have participated in literacy activities with a family member, by mother's employment status: 2001



Sources: Federal Interagency Forum on Child and Family Statistics. (2003). America's Children: Key National Indicators of Well-Being, 2003. Washington, DC: U.S. Government Printing Office; U.S. Department of Education, National Center for Education Statistics. (2001). National Household Education Survey, Early Childhood Program Participation. Washington, DC: U.S. Department of Education; U.S. Department of Education, National Center for Education Statistics. (1999). National Household Education Survey, Early Childhood Program Participation. Washington, DC: U.S. Department of Education; U.S. Department of Education, National Center for Education Statistics. (1996). National Household Education Survey, Parent and Family Involvement in Education File. Washington, DC: U.S. Department of Education; U.S. Department of Education, National Center for Education Statistics. (1995). National Household Education Survey, Early Childhood Program Participation. Washington, DC: U.S. Department of Education, National Center for Education Statistics. (1993). National Household Education Survey, School Readiness File. Washington, DC: U.S. Department of Education.

# EA 3.2 Reading Habits of Children and Youth

Independent reading is one necessary aspect of literacy development. The National Assessment of Educational Progress (NAEP) has documented the association between youth who read for fun in their free time and reading achievement. Youth ages 9, 13, and 17 who read more frequently for fun had consistently higher average reading proficiency scores than those who read less often.<sup>1</sup>

Table EA 3.2 presents the percentage of youth who read for fun on a daily basis for three age groups (9-, 13-, and 17-year-olds).

**Differences by Age.** In 1999, more than half of 9-year-olds (54 percent) reported reading for fun on a daily basis, compared with about one-third of 13-year-olds (28 percent) and one-quarter of 17-year-olds (25 percent) (Table EA 3.2).

**Differences by Sex.** Among 9- and 13-year-olds, larger proportions of females than males reported frequent reading in their spare time. For example, more than half (63 percent) of 9-year-old females read for fun on a daily basis, compared with 45 percent of 9-year-old males, in 1999. Among 17-year-olds, however, similar proportions of males (26 percent) and females (24 percent) reported reading on a daily basis in 1999 (Figure EA 3.2).

**Differences by Race and Hispanic Origin.**<sup>2</sup> In 1999, the percentage of 9-, 13-, and 17-year-olds who reported reading for fun on a daily basis was similar for all racial/ethnic groups (Table EA 3.2).

**Differences by Parents' Education Level.**<sup>3</sup> In 1999, 13-year-olds whose better-educated parent had some education after high school were more likely to read for fun than those whose parent(s) had no education beyond high school (Table EA 3.2). A similar pattern is found among 17-year-olds. In 1999, 32 percent of 17-year-olds whose better-educated parent had graduated from college read for fun on a daily basis. In contrast, 12 percent of 17-year-olds whose parent(s) had graduated from high school (but had no education beyond that) and 13 percent whose parent(s) had not finished high school reported reading for fun on a daily basis (Table EA 3.2).

**Differences by Type of School.** Larger percentages of 13- and 17-year-olds who attended nonpublic schools read for fun on a daily basis than did their counterparts in public schools (Table EA 3.2). Among 9-year-olds, a larger percentage of public school students reported reading for fun in 1992 and 1994, but this pattern reversed in 1996 and the percentages for both school types were equal in 1999 (Table EA 3.2).

<sup>1</sup> Campbell, J. R., Voelkl, K. E., & Donahue, P. L. (1997). NAEP 1996 Trends in Academic Progress. Washington, DC: National Center for Education Statistics.

<sup>&</sup>lt;sup>2</sup> Persons of Hispanic origin may be of any race.

<sup>&</sup>lt;sup>3</sup> Parents' education level refers to the highest level of education completed by either parent.

Table EA 3.2

Percentage of youth ages 9, 13, and 17 who read for fun on a daily basis, by sex, race and Hispanic origin, parents' education level, and type of school: Selected years, 1992-1999

	Age 9				Age	13			Age	17		
	1992	1994	1996	1999	1992	1994	1996	1999	1992	1994	1996	1999
All youth	56	58	54	54	37	32	32	28	27	30	23	25
Sex												
Male	48	49	51	45	30	25	27	23	23	29	22	26
Female	64	66	57	63	44	39	38	34	30	30	24	24
Race and Hispanic origina												
White, non-Hispanic	57	58	54	52	37	38	33	28	29	34	24	25
Black, non-Hispanic	54	58	51	57	35	18	29	33	14	16	21	22
Hispanic	54	58	56	55	44	15	28	23	25	17	21	28
Parents' highest education <sup>b</sup>												
Less than high school	_	_	_	_	16	24	29	31	23	15	14	13
High school	_	_	_	_	33	28	28	21	16	25	18	12
Some college	_	_	_	_	37	40	41	31	28	30	22	33
College degree	_	_	_	_	44	37	34	33	35	36	28	32
Type of school												
Public	57	57	54	55	36	31	33	28	26	29	21	24
Nonpublic	52	54	61	55	49	40	36	42	44	46	28	48

<sup>&</sup>lt;sup>a</sup> Persons of Hispanic origin may be of any race.

Sources: U.S. Department of Education, National Center for Education Statistics. (1999). National Assessment of Educational Progress. Unpublished work. U.S. Department of Education, National Center for Education Statistics. (1996). National Assessment of Education Progress. Unpublished work. U.S. Department of Education, National Center for Education Statistics. (1994). National Assessment of Education Progress: Long-Term Trends, Reading Assessment. Washington, DC: U.S. Department of Education; U.S. Department of Education, National Center for Education Statistics. (1992). National Assessment of Education Progress. Unpublished work.

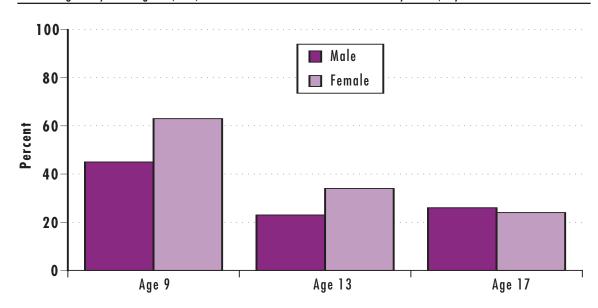
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<sup>&</sup>lt;sup>b</sup> Parents' education level refers to the highest level of education completed by either parent.

<sup>—</sup> Data not available.

Figure EA 3.2

Percentage of youth ages 9, 13, and 17 who read for fun on a daily basis, by sex: 1999



Sources: U.S. Department of Education, National Center for Education Statistics. (1999). National Assessment of Educational Progress. Unpublished work. U.S. Department of Education, National Center for Education Statistics. (1996). National Assessment of Education Progress. Unpublished work. U.S. Department of Education, National Center for Education Statistics. (1994). National Assessment of Education Progress: Long-Term Trends, Reading Assessment. Washington, DC: U.S. Department of Education; U.S. Department of Education, National Center for Education Statistics. (1992). National Assessment of Education Progress. Unpublished work.

### EA 3.3 Parental Involvement in Child's School

Many educators consider parental involvement in school activities to have a beneficial effect on children's school performance. They associate higher levels of parental involvement with greater monitoring of school and classroom activities, a closer coordination of teacher and parent efforts, greater teacher attention to the child, and earlier identification of problems that might inhibit learning.<sup>1</sup>

Parental involvement of both mothers and fathers in their child's school is significantly associated with an increased likelihood of 1st graders through 12th graders earning mostly A's and with a reduced likelihood that these children will ever repeat a grade. Possible parental activities included in the following data are (1) attending general school meetings, (2) going to a regularly scheduled parent/teacher conference, (3) attending a school or class event such as a play or sports event, and (4) volunteering at the school or serving on a school committee. A

**Differences by Grade**. The level of parental involvement in school activities decreases substantially as children get older. For example, 68 percent of 3rd through 5th graders had parents who were classified as highly involved in their children's schools. However, 40 percent of 9th through 12th graders had highly involved parents (Figure EA 3.3).

**Differences by Race and Hispanic Origin.**<sup>4</sup> Parents of White, non-Hispanic children were more likely than parents of Black, non-Hispanic or Hispanic children to be highly involved in their children's schools at each grade level (Table EA 3.3).

**Differences by Poverty Status.** Children living in nonpoor households were much more likely to have highly involved parents than children living in poor households, at all grade levels. Children whose mothers had higher levels of education had more highly involved parents than children whose mothers had lower education levels, at all grades (Table EA 3.3).

Differences by Family Type. Children in two-parent families were more likely than children in single-parent families to have parents who were highly involved in school activities. Furthermore, among children in two-parent families, mothers were more likely to be highly involved than fathers. For example, in 1999, about half of children in grades 6 through 8 had highly involved mothers, but only one-quarter had highly involved fathers. Furthermore, children in single-mother families were somewhat less likely to have highly involved mothers than comparable children in two-parent families. However, children in single-father families were more likely to have a highly involved father than comparable children in two-parent families.

**Differences by Mother's Employment Status.** Children in grades 3 through 12 whose mothers worked part-time had more highly involved parents than students whose mothers either worked full-time or who were not in the labor force. (Table EA 3.3).

<sup>&</sup>lt;sup>1</sup> Zill, N. & Nord, C. W. (1994). Running in Place: How American Families Are Faring in a Changing Economy and Individualistic Society. Washington, DC.

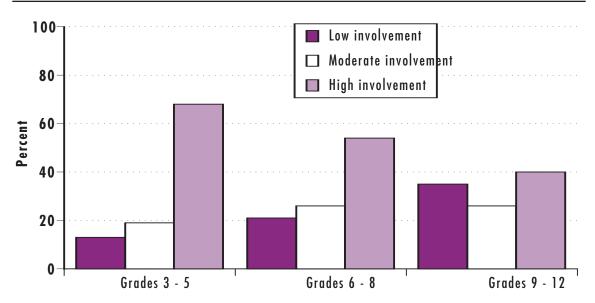
Nord, C. W., Brimhall, D., & West, J. (1997). Fathers' Involvement in Their Children's Schools. Washington, DC: National Center for Education Statistics.

<sup>&</sup>lt;sup>3</sup> The level of involvement depends on the number of different activities reported by the parents, ranging from 0 or 1 (low involvement) to 2 (moderate involvement) to 3 or more activities (high involvement). Note that the total number of times that the parent has been involved in each activity was not measured.

<sup>&</sup>lt;sup>4</sup> Persons of Hispanic origin may be of any race.

Figure EA 3.3

Percentage of parental involvement in child's school activities by grade level: 1999



Source: U.S. Department of Education, National Center for Education Statistics. (1999). National Household Education Survey, Parent and Family Involvement in Education. Washington, DC: U.S. Department of Education.

Table EA 3.3

Percentage of children whose parents are involved in their schools, by level of involvement, grade, and child and family characteristics: 1999

	Lo	w Involvem	ent	Mode	rate Involve	ement	Hiç	jh Involvem	ent
	Grades 3 - 5	Grades 6 - 8	Grades 9 - 12	Grades 3 - 5	Grades 6 - 8	Grades 9 - 12	Grades 3 - 5	Grades 6 - 8	Grades 9 - 12
All children	13	21	35	19	26	26	68	54	40
Sex									
Male	14	21	36	19	26	25	67	54	39
Female	11	20	34	19	25	26	70	55	40
Race and Hispanic origina									
White, non-Hispanic	10	17	31	16	25	26	74	58	43
Black, non-Hispanic	19	27	40	24	28	26	58	45	34
Hispanic	20	31	49	23	26	24	57	43	27
Poverty status									
At or above poverty	10	17	32	17	25	26	73	59	43
Below poverty	21	35	48	27	29	25	53	36	26
Family structure <sup>b</sup>									
Two parents	10	17	31	17	24	25	73	59	45
Mother <sup>c</sup>	14	21	36	18	27	24	68	52	41
Father	40	47	55	26	25	21	34	29	24
One or no parent	18	28	43	24	28	27	59	44	30
Mother-only	17	29	42	22	28	28	61	44	30
Father-only	18	22	38	25	28	25	57	50	37
Nonparent guardian(s)	24	26	51	32	31	28	44	44	21
Mother's highest education <sup>c</sup>									
Less than high school	27	38	58	30	28	26	44	34	16
High school	17	24	41	21	28	25	62	48	35
Some college	9	19	34	17	28	25	74	54	41
College degree	6	11	20	13	18	27	81	71	53
Mother's employment status <sup>c</sup>									
35 hours or more per week	12	19	34	22	26	27	66	55	39
Less than 35 hours per week	8	18	30	16	24	24	76	59	46
Not in labor force	16	26	40	15	25	23	69	49	36

<sup>&</sup>lt;sup>a</sup> Persons of Hispanic origin may be of any race.

Note: Low involvement = involvement in 0 or 1 activity. Moderate involvement = 2 activities. High involvement = 3 or more activities. Possible activities include (1) attending general school meetings, (2) going to a regularly scheduled parent-teacher conference, (3) attending a school or class event, and (4) volunteering at the school or serving on a school committee.

Source: U.S. Department of Education, National Center for Education Statistics. (1999). *National Household Education Survey, Parent and Family Involvement in Education*. Washington, DC: U.S. Department of Education.

<sup>&</sup>lt;sup>b</sup> Parents include any combination of a biological, adoptive, step-, and foster mother and/or father. No parents in the household indicates that the child is living with nonparent guardians (e.g., grandparents). Estimates for single parent households may include involvement of other adults living in the household.

<sup>&</sup>lt;sup>c</sup> Children without mothers in the home are not included in estimates of mother's education or mother's employment status. A mother is defined as a biological mother, adoptive mother, stepmother, foster mother, or female guardian (e.g., grandmother) who resides in the home with the child.

# EA 3.4 Difficulty Speaking English

Difficulty speaking English may limit children's educational progress and their future employment prospects. Children also may need special instruction in school to improve their English. Difficulty speaking English is most common among immigrant children and U.S.-born children of immigrants. In the past three decades, the great majority of immigrants to the United States have come from Asia, Latin America, and the Caribbean.

In 1999, of the 8.8 million children ages 5 to 17 in the United States who spoke a language other than English at home, 2.6 million had difficulty speaking English. While the proportion of all children experiencing difficulty speaking English doubled between 1979 and 1999, this group constituted only 5 percent of the total population of children ages 5 to 17 in 1999 (Table EA 3.4).

**Differences by Race and Hispanic Origin.** Children of Hispanic or "other" ethnic origin are more likely than Black, non-Hispanic or White, non-Hispanic children to have difficulty speaking English. These differences are due in part to the fact that Hispanic and Asian children are more likely than Whites or Blacks to speak another language in the home. For example, 3.9 percent of White, non-Hispanic children ages 5 to 17 speak another language in the home, compared to 70.9 percent of Hispanic children (Figure EA 3.4).

**Differences by Region.** The percentage of children who speak another language at home varies substantially by geographic region, ranging from 7.5 percent in the Midwest to 28.8 percent in the West in 1999. Furthermore, in the West, more than 10 percent of children have difficulty speaking English, compared to 2 percent in the Midwest.

<sup>&</sup>lt;sup>1</sup> Persons of Hispanic origin may be of any race.

Table EA 3.4

Percentage of children ages 5 to 17 who speak a language other than English at home, and who have difficulty speaking English, by race and Hispanic origin and by region: Selected years, 1979-1999

	1979	1989	1992	1995a	1999a
Children who speak another language at home					
Number (in millions)	3.8	5.3	6.4	6.7	8.8
Percentage	8.5	12.6	14.2	14.1	16.7
Race and Hispanic origin <sup>b</sup>					
White, non Hispanic	3.2	3.5	3.7	3.6	3.9
Black, non-Hispanic	1.3	2.4	4.2	3.0	4.5
Hispanic	75.1	71.2	76.6	73.9	70.9
Other, non-Hispanic	44.1	53.4	58.3	45.5	51.0
Region <sup>c</sup>					
Northeast	10.5	13.5	16.2	15.1	17.7
Midwest	3.7	4.9	5.6	5.9	7.5
South	6.8	10.7	11.1	11.7	14.3
West	17.0	24.2	27.2	26.4	28.8
Children who have difficulty speaking English					
Number (in millions)	1.3	1.9	2.2	2.4	2.6
Percentage	2.8	4.4	4.9	5.1	5.0
Race and Hispanic origin <sup>b</sup>					
White, non-Hispanic	0.5	0.8	0.6	0.7	1.0
Black, non-Hispanic	0.3	0.5	1.3	0.9	1.0
Hispanic	28.7	27.4	29.9	31.0	23.4
Other, non-Hispanic	19.8	20.4	21.0	14.1	11.7
Region <sup>c</sup>					
Northeast	2.9	4.8	5.3	5.0	4.4
Midwest	1.1	1.3	1.6	2.3	2.0
South	2.2	3.8	3.5	3.4	3.6
West	6.5	8.8	10.4	11.4	10.6
Children speaking another language at home					
who have difficulty speaking English (percent)	32.7	35.0	34.2	36.5	29.5
Race and Hispanic origin <sup>b</sup>					
White, non-Hispanic	15.6	22.9	16.2	19.4	25.6
Black, non-Hispanic	23.1	20.8	31.0	30.0	22.2
Hispanic	38.2	38.5	39.0	41.9	33.0
Other, non-Hispanic	44.9	38.2	36.0	31.0	22.9

a Numbers in 1995 and later years may reflect changes in the Current Population Survey because of newly instituted computer-assisted interviewing techniques and/or because of the change in the population controls to the 1990 Census-based estimates, with adjustments.

Note: Respondents were asked if the children in the household spoke a language other than English at home and how well they could speak English. Categories used for reporting were "Very well," "Well," "Not well," and "Not at all." All those reported to speak English less than "Very well" were considered to have difficulty speaking English.

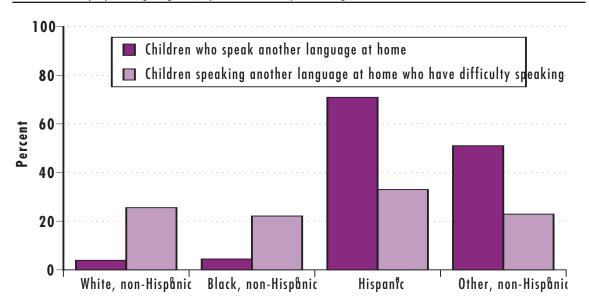
Source: Federal Interagency Forum on Child and Family Statistics. (2003). America's Children: Key National Indicators of Well-Being, 2003. Washington, DC: U.S. Government Printing Office.

<sup>&</sup>lt;sup>b</sup> Persons of Hispanic origin may be of any race.

<sup>&</sup>lt;sup>c</sup> Regions: Northeast includes CT, ME, MA, NH, NJ, NY, PA, RI, and VT. Midwest includes IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, and WI. South includes AL, AR, DE, DC FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, and WV. West includes AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, and WY.

Figure EA 3.4

Percentage of children ages 5 to 17 who speak a language other than English at home and who have difficulty speaking English, by race and Hispanic origin: 1999



<sup>&</sup>lt;sup>a</sup> Persons of Hispanic origin may be of any race.

Source: Federal Interagency Forum on Child and Family Statistics. (2003). America's Children: Key National Indicators of Well-Being, 2003. Washington, DC: U.S. Government Printing Office.

# EA 3.5 Student Computer Use

Computer literacy has become increasingly important for success in the workplace. Computers have become an essential tool for retrieving and manipulating information, for producing reports, and for communicating with colleagues. The extent to which children have access to computers and the uses children make of computers may be an indicator of how well prepared students will be to enter an increasingly technological workplace.

The percentage of 4th, 8th, and 12th graders who reported using a computer for schoolwork 1 to 2 times a week increased substantially between 1992 and 1998 (Table EA 3.5.A). For example, 14 percent of 12th graders reported using a computer at school 1 to 2 times a week in 1992, compared with 28 percent in 1998.

Student access to computers has increased both at home and at school. Within public schools, access to the technology has changed dramatically in the last decade. In fall 2001, 99 percent of public school in the United States had access to the internet, while 6 years earlier, just over one-third of schools were connected (Table EA 3.5.B). Public schools also have made consistent progress in installing Internet to instructional classrooms, from 3 percent in 1994 to 87 percent in 2001 (Figure EA 3.5.A). Public schools also have continuously added more computers for their students. The ratio of students to instructional computers dropped from 12.1 in 1998, to 5.4 in 2001 (Table EA 3.5.B).

**Differences by Grade.** Computer usage for schoolwork appears to increase as students enter the higher grades. For example, in 1998, 8 percent of 4th graders reported using a computer every day for schoolwork, while 21 percent of 12th graders reported the same.

**Differences by Family Income.**<sup>2</sup> Students from high-income families were more likely than students from middle- and low-income families to report using a computer at home or at school in 1992 (Figure EA 3.5.B and Table EA 3.5.C). However, family income appears to have a stronger impact on children's exposure to computers at home than at school. For example, in 1997, the rate of computer usage at home was 15 percent for students in grades 7-12 from low-income families, compared with 79 percent for students from high-income families in the same grades. The corresponding computer usage rates at school were 68 percent and 75 percent for students in grades 7-12 from low-income and high-income families, respectively (Table EA 3.5.C).

U.S. Department of Education, National Center for Education Statistics. (2002). Internet Access in the U.S. Public Schools and Classrooms: 1994-2001. Washington, DC: U.S. Government Printing Office.

<sup>&</sup>lt;sup>2</sup> Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent in between.

Table EA 3.5.A

Percentage of students who reported using a computer for schoolwork, by grade and frequency of use: Selected years, 1992-2000

		Gra	de 4			Gra	de 8			Grad	le 12	
	1992	1994	1998	2000	1992	1994	1998	2000	1992	1994	1998	2000
Frequency of use												
Never	67	60	54	57	58	51	32	_	45	37	22	_
Ever	33	40	46	43	42	49	68	_	55	63	78	_
1-2 times a month	10	11	18	17	20	23	29	_	22	26	30	_
1-2 times a week	17	21	20	17	14	16	25	_	14	18	28	_
Every day	6	9	8	8	8	10	15	_	18	18	21	_

Note: The 2000 NAEP reading assessment assessed students only in grade 4.

Source: U.S. Department of Education, National Center for Education Statistics. (2001). *National Assessment of Educational Progress (NAEP)*. Washington, DC: U.S. Department of Education.

Table EA 3.5.B

Student access to the Internet in public schools, by instructional level: 1994-2001

	1994	1995	1996	1997	1998	1999	2000	2001
Public schools with Internet accessa	35	50	65	78	89	95	98	99
Instructional level								
Elementary	30	46	61	75	88	94	97	99
Secondary	49	65	77	89	94	98	100 <sup>b</sup>	100 <sup>b</sup>
Public school instructional rooms with Internet access <sup>c</sup>	3	8	14	27	51	64	77	87
Instructional level								
Elementary	3	8	13	24	51	62	76	86
Secondary	4	8	16	32	52	67	79	88
Ratio of public school students								
to instruction computers with Internet access	_	_	_		12.1	9.1	6.6	5.4
Instructional level								
Elementary	_		_		13.6	10.6	7.8	6.1
Secondary	_		_		9.9	7	5.2	4.3

<sup>&</sup>lt;sup>a</sup> Data for combined schools are included in the totals.

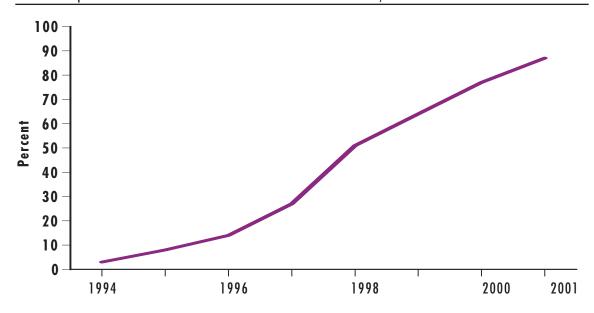
Source: U.S. Department of Education, National Center for Education Statistics. (2002). Internet Access in U.S. Public Schools and Classrooms: 1994-2001. Washington, DC: U.S. Government Printing Office.

 $<sup>^{\</sup>rm b}$  The estimate fell between 99.5 percent and 100 percent and therefore was rounded to 100 percent.

<sup>&</sup>lt;sup>c</sup> Instructional rooms include classrooms, computer and other instructional labs, library/media centers, and any other rooms used for instructional purposes.

Figure EA 3.5.A

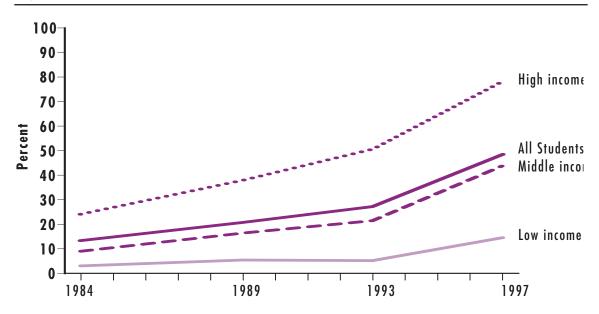
Percent of public school instructional rooms with Internet access, 1994-2001



Source: U.S. Department of Education, National Center for Education Statistics. (2002). *Internet Access in U.S. Public Schools and Classrooms: 1994-2001*. Washington, DC: U.S. Government Printing Office.

Figure EA 3.5.B

Percentage of students in grades 7-12 who reported using a computer at home, by family income: 1984-1997



Source: U.S. Department of Education, National Center for Education Statistics. (2000). *The Condition of Education, 1999*. Washington, DC: U.S. Government Printing Office.

Table EA 3.5.C

Percentage of students who reported using a computer at school or at home, by grade level and family income: Selected years, 1984-1997

					Income level											
	Total				Lo	W			Middle			Hi	High			
	1984	1989	1993	1997	1984	1989	1993	1997	1984	1989	1993	1997	1984	1989	1993	1997
Grades 1-6																
At home	11.8	16.1	23.0	41.3	2.5	5.7	3.9	12.4	9.7	17.0	18.0	36.4	24.4	38.3	48.5	74.6
At school	30.5	52.4	66.6	79.1	18.5	39.4	57.4	70.9	29.5	52.3	66.2	78.6	42.2	62.5	74.0	86.5
At school or home	36.2	56.9	70.7	83.8	20.0	39.0	58.1	71.9	34.5	49.9	69.5	82.8	53.0	63.9	82.4	95.0
Grades 7-12																
At home	13.4	21.1	27.7	49.2	3.3	5.7	5.6	14.9	10.1	17.0	22.2	44.2	24.8	38.3	51.2	78.6
At school	28.9	43.0	57.0	73.5	20.0	36.7	49.0	67.6	28.4	42.6	57.3	74.1	34.1	47.2	60.7	75.4
At school or home	36.2	52.1	65.6	84.3	22.2	39.0	50.4	70.7	33.6	49.9	64.1	83.5	48.1	63.9	77.0	93.3

Note: Low income is the bottom 20 percent of all family incomes; high income is the top 20 percent of all family incomes; and middle income is the 60 percent in between.

Source: U.S. Department of Education, National Center for Education Statistics. (2000). *The Condition of Education, 1999.* Washington, DC: U.S. Government Printing Office.

# EA 3.6 Children Served Under the Individuals with Disabilities Education Act

Children and youth with disabilities often require additional support in meeting their educational goals. The Individuals with Disabilities Education Act (IDEA) strengthens the educational expectations and accountability for children and youth with disabilities and more closely aligns what disabled students learn and the curricula presented in general education classrooms. The disabilities of children served under IDEA include physical impairments, emotional disturbances, and mental retardation (Table EA 3.6.A). Overall, specific learning disabilities are the most prevalent disability among students served under IDEA.

In 2002, approximately 5.7 million children and youth ages 6 to 17 were served under IDEA (Table 3.6.B). The number of children served under IDEA has been steadily increasing since 1990, when approximately 4.1 million children were served. Overall, males compose two-thirds of the disabled student population. <sup>1</sup>

IDEA requires that students with disabilities be educated in the least restrictive environment (LRE) available. Research suggests that disabled students benefit from inclusion in general education classrooms, especially in the development of communication and social skills. Recent trends indicate that more and more disabled students are being taught in the general education classroom. Figure EA 3.6 shows the percentage of disabled children educated in different educational environments. From 1989 to 2002, the percentage of disabled children educated in the regular classroom for at least 80 percent of the school day increased from 31.5 to 48.2 percent. In contrast, the percentage of disabled students educated in separate facilities decreased from 6.1 percent in 1989 to 4.0 percent in 2002.

**Differences by Race and Hispanic Origin**. Data on the race and ethnicity of students served under IDEA was first collected at the national level in 1998. In 2002, the population of children and youth served under IDEA included approximately 60 percent White, non-Hispanic students, 20 percent Black, non-Hispanic students, and 16 percent Hispanic students (Table EA 3.6.C).

<sup>&</sup>lt;sup>1</sup> U. S. Department of Education (1998). Twentieth annual report to Congress on the implementation of the Individuals with Disabilities Education Act.

<sup>&</sup>lt;sup>2</sup> U. S. Department of Education (1999). Twenty-first annual report to Congress on the implementation of the Individuals with Disabilities Education Act.

Table EA 3.6.A

Percentage of students ages 6-21 served under IDEA, Part B, with various disabilities: Selected years, 1990-2002

	1990	1995	1996	1997	1998	1999	2000	2001	2002
Specific Learning Disabilities	49.16	51.23	51.13	51.04	50.82	50.51	49.91	49.11	48.30
Speech or Language Impairments	22.65	20.22	20.05	19.71	19.39	19.16	18.94	18.65	18.66
Mental Retardation	12.64	11.53	11.35	11.18	11.02	10.82	10.62	10.32	9.92
Emotional Disturbance	8.96	8.65	8.53	8.42	8.35	8.27	8.21	8.15	8.07
Multiple Disabilities	2.24	1.86	1.90	1.99	1.95	1.99	2.13	2.20	2.21
Hearing Impairments	1.36	1.34	1.31	1.29	1.28	1.26	1.23	1.22	1.21
Orthopedic Impairments	1.13	1.24	1.27	1.25	1.25	1.26	1.26	1.26	1.24
Other Health Impairments	1.29	2.64	3.08	3.54	4.00	4.50	5.09	5.82	6.59
Visual Impairments	0.54	0.50	0.49	0.48	0.47	0.46	0.45	0.44	0.44
Autism	_	0.57	0.66	0.79	0.98	1.16	1.38	1.68	1.99
Deaf-Blindness	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.03	0.03
Traumatic Brain Injury	_	0.19	0.20	0.22	0.23	0.24	0.26	0.35	0.36
Developmental Delay	_	_	_	0.07	0.21	0.34	0.50	0.77	0.98

Note: Counts are for the U.S. and Outlying Areas. The counts for 1990 include children served under Chapter 1 of the Elementary and Secondary Education Act and Individuals with Disabilities Education Act (IDEA), formerly the Education of the Handicapped Act. Prior to October 1994, children and youth with disabilities were served under both IDEA and Chapter 1. In October 1994, Congress passed the Improving America's Schools Act in which funding for children and youth with disabilities was consolidated under IDEA. Reporting autism and traumatic brain injury was required under IDEA beginning in 1992 and was optional in 1991. States had the option of reporting children ages 6-9 under developmental delay beginning in 1997. Beginning in 1998, New Jersey's Traumatic Brain Injury (TBI) count includes children with neurological impairments. Beginning in 2001, Massachusetts TBI count was based on a definition of neurological impairments.

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Table EA 3.6.B

Number of students served under IDEA Part B, by age: 1990-2002

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Number of children served (in millions)													
Ages 6-11	2.3	2.4	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.8	2.8	2.8	2.8
Ages 12-17	1.8	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
Ages 18-21	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

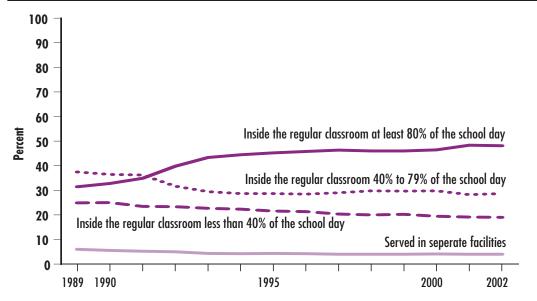
Note: Counts are for the U.S. and outlying areas. The counts for 1990 through 1993 include childern served under Chapter 1 of the Elementary and Secondary Education Act and Individuals with Disabilities Education Act (IDEA), formerly the Education of the Handicapped Act. Prior to October 1994, children and youth with disabilities were served under both IDEA and Chapter 1. In October 1994, Congress passed the Improving America's Schools Act, in which funding for children and youth with disabilities was consolodated under IDEA.

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Data not available.

Figure EA 3.6

Percentage of students ages 6-21 with disabilities served in various educational environments: 1989-2002



Note: Counts are for the U.S. and Outlying Areas. The counts for 1989 through 1993 include children served under Chapter 1 of the Elementary and Secondary Education Act and Individuals with Disabilities Education Act (IDEA), formerly the Education of the Handicapped Act. Prior to October 1994, children and youth with disabilities were served under both IDEA and Chapter 1. In October 1994, Congress passed the Improving America's Schools Act in which funding for children and youth with disabilities was consolidated under IDEA.

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

Table EA 3.6.C
Race and Hispanic origin of students ages 6-21 served under IDEA, Part B: 1998-2002

	1998	1999	2000	2001	2002
White, non-Hispanic	63.0	62.2	61.6	60.8	60.2
Black, non-Hispanic	20.0	20.1	20.2	20.4	20.4
Hispanic	13.9	14.6	14.9	15.4	15.9
Asian/Pacific Islander	1.8	1.9	1.9	1.9	2.0
American Indian/Alaska Native	1.2	1.5	1.4	1.4	1.5

Note: Counts are for the U.S. and Outlying Areas

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).